

**Keywords:** cardiac arrest, pulse check, ultrasound

#### P027

##### Development of a physician assistant lead stroke protocol to provide timely and equitable access to hyperacute stroke care in a telestroke community hospital

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**Background:** The Brant Community Healthcare System (BCHS) has consistently been well above the recommended 30 minute benchmark for door-to-needle (DTN) for eligible acute stroke patients. As a large community hospital with no neurologists, and like many other hospitals internationally, we rely on telestroke support for every stroke case. This is a time-consuming process that requires a multitude of phone calls, and pulls physicians from other acutely ill patients. We sought to develop a system that would streamline our approach and care for hyperacute stroke patients by targeting improvements in DTN. **Aim Statement:** We will decrease the door-to-needle (DTN) time for stroke patients arriving at the BCHS Emergency Department (ED) who are eligible for tissue plasminogen activator (tPA) by 25% from a median of 87 minutes to 50 minutes by March 31, 2018 and maintain that standard. **Measures & Design:** Outcome Measures: Door-to-needle time for acute stroke patients receiving tPA Process Measures: Door-to-triage time, Door-to-CT time, Door-to-CTA time; INR collection-to-verification time, telestroke callback time Balancing Measures: Number of stroke protocol patients per month Model Design: We simultaneously designed and implemented a robust program to train physician assistants in hyperacute stroke care. **Evaluation/Results:** Through vast stakeholder engagement and implementing a multitude of change ideas, by March of 2018 we had achieved an average DTN of 53 minutes. Our door-to-triage time went from an average of 7 minutes to 3 minutes. Our door-to-CT time decreased from 17 minutes to 7 minutes and our time between CT and CTA from an average of 13 minutes to 3 minutes. One and a half years later, our average DTN is maintained at 55 minutes and physician assistants continue to effectively lead and liaise with telestroke neurologists and stroke patients. **Discussion/Impact:** Prior to this program, acute stroke care was a very contentious topic at our local community hospital. Creating a program that streamlined the care and standardized the work has proven successful, and not only allowed for improved DTN times but also freed up physicians to better simultaneously care for other acutely ill patients.

**Keywords:** door-to-needle time, quality improvement and patient safety, stroke

#### P028

##### Antibiotic prescribing and use of corticosteroids for the emergency department management of acute pharyngitis

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**Introduction:** Acute pharyngitis is a common emergency department (ED) presentation. The Centor (Modified/McIsaac) score uses five criteria (age, tonsillar exudates, swollen tender anterior cervical nodes, absence of a cough, and history of fever) to predict Group A Streptococcus (GAS) infection. The recommendation is patients with a Centor score of 0-1 should not undergo testing and should

not be given antibiotics, patients with a score of 2-3 may warrant throat cultures, and for patients with a score  $\geq 4$ , empiric antibiotics may be appropriate. Associated pain is often first managed with acetaminophen or non-steroidal anti-inflammatory drugs, however recent evidence suggests a short course of low-to-moderate dose corticosteroids as adjunctive therapy may reduce inflammation and provide pain relief. The objective of this study was to describe the ED management of acute pharyngitis for adult patients presenting to an academic ED over a two-year study period. **Methods:** This was a retrospective chart review of all adult ( $> 17$  years) patients presenting to Mount Sinai Hospital ED with a discharge diagnosis of acute pharyngitis (ICD-10 code J02.9) from January 1st 2016 to December 31st 2018. Trained research personnel reviewed medical records and extracted data using a computerized, data abstraction form. **Results:** Of the 638 patients included in the study, 286 (44.8%) had a Centor score of 0-1, 328 (51.4%) had a score of 2-3, and 24 (3.8%) had a score of  $\geq 4$ . Of those with a Centor score of 0-1, 83 (29.0%) had a throat culture, 88 (30.8%) were prescribed antibiotics, 15 (5.2%) were positive for GAS and 74 (25.9%) were given corticosteroids in the ED or at discharge. Of those with a Centor score of 2-3, 156 (47.6%) had a throat culture, 220 (67.1%) were prescribed antibiotics, 44 (13.4%) were positive for GAS, and 145 (44.2%) were given corticosteroids. Of those with a Centor score  $\geq 4$ , 14 (58.3%) had a throat culture, 18 (75.0%) were prescribed antibiotics, 7 (29.2%) were positive for GAS and 12 (50.0%) were given corticosteroids. **Conclusion:** As predicted, a higher Centor score was associated with higher risk of GAS infection, increased antibiotic prescribing and use of corticosteroids. Many patients with low Centor scores were prescribed antibiotics and also had throat cultures. Further work is required to understand clinical decision making for the management of acute pharyngitis.

**Keywords:** antibiotic, corticosteroids, pharyngitis

#### P029

##### Requesting prescriptions in the emergency department: the patient, the request and the response

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**Introduction:** Patients presenting to the Emergency Department (ED) for the sole purpose of requesting prescriptions are problematic. Problematic for the patient, who may have a long wait to be seen and may leave dissatisfied. Problematic for the ED physician, who is in the business of episodic not comprehensive care and is diligently trying to avoid the misappropriation of medications. The primary objective of this study was to determine the characteristics of patients who present to the ED or Urgent Care Centre (UCC) requesting a prescription, the nature of these requests and the resulting action by the attending physician. The secondary objective was to determine the proportion of medication requests and responses that have potential street value. With this knowledge we may be better positioned to serve these patients and support physician decision-making. **Methods:** This was a single-centre, retrospective electronic chart review looking at all adult patients with a presenting complaint of medication request who attended a two-site tertiary ED or an Urgent Care Centre (UCC) in London, Ontario between April 1, 2014 and June 30, 2017. Data was tested for normality and analyzed using descriptive statistics. **Results:** A total of 1923 cases met the inclusion criteria. Cases were removed ( $n = 421$ ) if it was unclear which prescription was requested or if a non-medication prescription or injection was requested. The patient median (IQR) age was 44 (32-54) with 58% being male and